



My Father's Prairie

My husband, Ross likes to say when you're navigating the rapids, you should paddle for the smooth waters. We are at that stage in life where our parents are aging, and their lives are punctuated by medical crises. The kids are old enough to be on their own, but young enough to not yet be secure. So we try to enjoy the quiet times, knowing that trouble often lurks just around the bend. A few weeks ago, an unexpected phone call from my mother sent me over to western Minnesota, in order to accompany Mom to a Fargo hospital in time for my father's triple-bypass surgery. Having seen with my mother-in-law that life-saving surgery doesn't always bring great things, when my Dad was at that point in his surgery that I knew he was on a heart-lung bypass machine, I learned to pray differently. His heart is in your hands, I said. Please choose what is best.

It's been quite a journey, since I first saw Dad emerge from surgery, supported by that breathing tube. He had some rocky times, but Dad has a kind of determination that is serving him well, and also a sense of responsibility to my Mom that keeps him trying. Gradually his stamina is improving, as well as his ability to begin to pick up some of his daily tasks. His interest in life is good to see.

That is perhaps why Ross volunteered to come over and help with some of the chores my father is currently unable to do. At first blush, you might think that some chores could wait for another time. But there are things we care about, the perpetuation of which feeds our well-being. You might say they are medicine for the heart. Maybe that's why Ross mowed Dad's prairie for him.

My father's prairie is a small, lake-side piece of ground upon which my Dad fosters an interesting mix of native plants. Dominated by the prairie cordgrass that originally inhabited this area, Dad has spent years combing the prairie restoration catalogs in order to add a number of other native grasses and forbs. One of my favorites of these is blazing star, or Liatris, the lilac flowers of which pull in the monarch butterflies. On a late summer day, you can see monarchs all over this little patch of ground, flitting from flower to flower as they feed on the nectar.

Many of us grew up with monarchs in our childhood classrooms. The Minnesota State insect, they are perhaps the most familiar of butterflies. With their bright orange and black coloration, most of us have heard of their connection with milkweed. A native wildflower, monarchs have been known to feed on over 27 species of milkweed. Although monarch butterflies feed on nectar from a variety of flowers, they require milkweeds on which to lay their eggs. The caterpillars hatch, eat the leaves, and ingest the toxin found in the milkweed sap. It makes the caterpillars and butterflies toxic, and taste bad, which cut down on predation. It is believed that birds learn to associate the monarch's color patterns with an unpleasant dining experience. The female monarch generally lays 1 egg on a milkweed plant. Over the course of 2 – 5 weeks, she will lay an average of 700 eggs.

Monarchs breed throughout the U.S. and southern Canada. Minnesota monarchs are part of what is known as the eastern population, which migrates to Mexico for the winter. A flight of up to 3,000 miles, the butterflies that make this flight are going to a place neither they nor their parents have ever seen before. Most of the monarchs east of the Rockies converge in the mountains of central Mexico, where they form tight clusters on just a few acres of trees.

After a several months in Mexico, the return north begins. The University of Minnesota's Monarch Lab website (<http://monarchlab.org>) provides a detailed description of how the butterflies begin north in March, and lay eggs in northern Mexico and the Southern U.S. Their offspring hatch and fly north a ways, where they lay eggs, the second generation hatches and flies north a ways, and so forth. Hence, there is a multi-generational migration on their way north. Our Minnesota butterflies are generations 3 and 4, the great- and great-great grandchildren of those butterflies wintering in Mexico.

Monarch numbers are down over 90% over the past 20 years. There appear to be a number of reasons for this, perhaps chief of which is destruction of key milkweed habitats. In the Midwest, where most monarchs are born, there has been widespread planting of genetically engineered crops. This allows the use of herbicides in corn and soybean fields that kill milkweed. Additionally, increasingly high proportions of the landscape are devoted to such crops, reducing the overall availability of milkweed.

The use of a class of pesticide known as neonicotinoids is also believed to be detrimental to monarch caterpillars. As you plant your gardens this spring, watch for labelling which will help you to determine if your flowers have been treated with this substance.

Besides the milkweed issue, monarchs are threatened by global climate change. The entire winter range in Mexico and large parts of the summer range in the U.S. could become unsuitable for monarchs due to changing temperatures, increased risk of drought, heat waves, and severe storms. If that isn't enough, logging in Mexican forests where monarchs overwinter has hurt the overall population.

In August of 2014, conservation groups including the Center for Biological Diversity, Center for Food Safety, Xerces Society, and a butterfly expert petitioned the U.S. government to list the

monarch as a threatened species. The U.S. Fish and Wildlife Service is currently reviewing that situation.

The plight of the monarch is considered to be an indicator of a bigger problem, as the state of the monarch reflects the health of America's landscapes. In August of 2014, the Chief of the Forest Service finalized memoranda of understanding with the Xerces Society for Invertebrate Conservation and the North American Butterfly Association, recognizing our mutual interest in the conservation and management of pollinators, especially butterflies. Managing public lands in national forests and grasslands, the Forest Service is responsible for managing habitat to maintain populations of threatened, endangered, sensitive, and other species of plants and animals on national forests and grasslands. By managing for pollinators and their habitats on these lands, we help to ensure conservation of our Nation's biodiversity and create a healthier environment for both wildlife and people.

There are a number of native species of milkweed on the Chippewa National Forest. The occurrence of these plants generally not proximate to pesticides helps to support the monarch butterflies of our area. Public lands provide an opportunity to increase habitat for monarchs and other pollinators.

If you want to learn more about the conservation of monarchs, or plant milkweed to encourage monarchs on your property, you may want to consult the following websites (www.fws.savethemonarch, www.Xerces.org, www.plantmilkweed.org). It is advised to plant only native milkweeds, and those which specifically have not been treated with pesticides. It is also advised not to plant milkweeds near places where you will be using pesticides. Should you have the interest, you can even click on a map to watch as the spring butterfly migration heads north towards us.

Before Dad's heart attack, he had put in another order to the prairie restoration place. Just this past week, the box of plant sets arrived. Dad reports they included an unexpected package of milkweed seeds, which I believe my brother will be happy to plant when he comes up for a visit. In future years I hope to find Dad's prairie will not only serve as a delightful feeding spot for passing monarchs, but also a nursery for the young caterpillars. It will add another dimension to those lovely spring days in Ottertail County. If Dad develops the interest, maybe he will look into perpetuating milkweed for others to grow, as it is predicted there will be a shortage of milkweed sets as folks catch on to the power of backyard conservation efforts to save this butterfly.

The fringe benefits of having a little bonus time with my folks lately have included watching the return of life to the woods and wetlands that surround them. Sandhill cranes dance and call within hearing distance of my folks' place. A half a dozen wood ducks zip by, barely above tree line. A pair of trumpeter swans seems to be nesting in the wetland behind the house, and a ruffed grouse drums in the woods. Our dogs are thrilled by the



turkeys. We were there to see the ice go out on the lake, followed by a fascinating knot of a couple dozen coots swimming so close together you could barely see the spaces between them. We wondered about that, until we saw an eagle dive and dive again, hoping for a little coot for breakfast. Drink it all in, Dad. Spring is a time of renewal, and I think I see smoother paddling ahead.

by Kelly Barrett, Wildlife Biologist
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